54

19/385959

SEMICONDUCTOR APPARATUS AND PROCESS OF PRODUCTION THEREOF

ABSTRACT OF THE DISCLOSURE

5

15

10

20

A process of production of a semiconductor apparatus which can suppress a rise in the electrical resistance and a decline in the joint strength at the bump connection interfaces and improve the connection reliability when using the method of reinforcing the bases of the bumps by a resin film. Bumps are formed on a semiconductor wafer formed with a pattern circuit of a semiconductor chip so as to connect to the circuit pattern, a resin film is formed on the bump forming surface of the semiconductor wafer to a thickness giving a surface lower than the height of the bumps while sealing the spaces between the bumps, plasma cleaning etc., is used to remove the sealing resin components deposited on the surface portions of the bumps or natural oxides or other insulating impurities to clean and activate the surfaces of the bumps, and the chip is mounted on a mounting board.